



Regulatory
Document

Texte de
réglementation



Atomic Energy
Control Board

Commission de contrôle
de l'énergie atomique

REGULATORY DOCUMENT R-76

Policy and Procedures

ATOMIC ENERGY CONTROL BOARD POLICY
AND PROCEDURES ON REPRESENTATIONS
AND APPEARANCES

Effective date:

May 17, 1983

Canada

This policy and the related procedures were issued for public comment on August 10, 1982. Following review of the comments, the document was revised and subsequently approved by the Atomic Energy Control Board on May 16, 1983.

Atomic Energy Control Board Policy and Procedures on Representations and Appearances

In the past the AECB has received and considered representations and granted appearances. This document is issued to formalize this practice.

STATEMENT OF POLICY

The AECB recognizes that in fulfilling its regulatory responsibilities it should give interested parties* an opportunity to express their views on matters before the Board. It is therefore prepared to receive written statements of views (herein called representations), and in certain cases to grant appearances before the President and appropriate AECB staff, or at meetings of the Board, on matters which fall within the scope of the AECB's regulatory responsibilities.

BACKGROUND

Two principal responsibilities of the AECB are:

- (1) to develop regulations and other regulatory criteria to provide for the control of nuclear facilities and prescribed substances; and
- (2) to regulate the development and operation of nuclear facilities and the use of prescribed substances by applying the Atomic Energy Control Regulations through a comprehensive licensing system.

The Atomic Energy Control Act and Regulations are generally applied by the AECB to the health, safety and security aspects of nuclear facilities and prescribed substances.

To assist in the discharge of the regulations-development responsibility, the AECB has established a public consultation program. Interested persons may have their names entered on a mailing list to receive advance notice and draft copies of all regulations and other regulatory documents under development by the AECB. A period is provided for the receipt of comments which are then considered in a document's revision. The comments are placed in the AECB Ottawa public documents room and reviewed by AECB staff. Following a decision by the Board, an appropriately amended version of the regulations may be promulgated by Order-in-Council or the regulatory document may be issued directly by the AECB.

Nuclear facilities are regulated by the AECB through a multiple stage licensing process that relates generally to the site selection, the construction and the operation of the facilities. Each stage includes an

* An interested party may be a licence applicant, a licensee, one or more members of the public, or a special interest group.

application, a review of the application by AECB staff and possibly other regulatory agencies,* a staff recommendation to the Board and the Board's decision. At the stage of site selection, the applicant is required to hold a public information meeting on his application. In accordance with its policy on public access to licensing information, the AECB announces its receipt of the application and its decision, and the application and supporting documentation are made publicly available in the AECB Ottawa office.**

For those interested in licensing actions under consideration, the AECB makes available the following information:

- a regulatory agenda including a schedule of future licensing actions before the Board and the upcoming year's schedule of Board meetings. This regulatory agenda is updated semi-annually, and is available from the AECB Office of Public Information (OPI);
- the list of licensing actions on the agenda for the next Board meeting. This is available from the Secretary to the Board; and,
- final recommendations to the Board from the AECB staff on licensing matters. These are made available in the AECB Ottawa public documents room.

Relevant references and addresses may be found in Appendix 1.

The submission of representations and the making of appearances may be pursued by interested parties wishing to make a contribution to the licensing process.

REPRESENTATIONS AND APPEARANCES

Representations and appearances are primarily intended for addressing licensing issues and should follow the procedure outlined below:

- (1) Identify the matter to be addressed.
- (2) Develop views and supporting arguments with reference to material such as the application and supporting documentation. Ensure that such views and arguments are pertinent to the AECB's jurisdictional interests.

* Other regulatory agencies which may be involved in an application normally include the federal and provincial ministries of health, environment and labour.

** The AECB Ottawa office may be visited by the public on regular workdays from 8 a.m. to 4 p.m. Information may also be available at other locations depending on the specific case. The applicant or the AECB will, on request, provide the address of any other locations.

(3) Forward submissions as early as possible to the Secretary of the Board indicating whether the submission is a representation or a request for an appearance. In the latter case include names and particulars of persons who would be appearing. The deadlines for receipt of submissions by the AECB are as follows:

- Representations: 20 days in advance of the Board meeting
- Appearances: 30 days in advance of the appearance

These lead times are necessary to provide time for AECB staff assessment, referral to the President and other Board members as required, and, in the case of an appearance, to give adequate notice to any other interested party.

On receipt by the AECB of a representation or a request for an appearance, the following actions will be taken:

- (1) Receipt of the submission will be acknowledged.
- (2) The submission will be reviewed by the AECB staff and a copy of the submission will be placed in the AECB Ottawa public documents room.
- (3) a) On completion of its review the staff will forward the submission to the President along with its recommendations concerning the extent to which the views expressed in the representation warrant consideration.

b) In the case of a request for an appearance, the President will determine if an appearance should be granted, and whether the appearance will be before the President and appropriate staff, the Board, or both.
- (4) The interested party will be advised of the results of the staff review and of actions taken. If an appearance is granted, the party will be advised of the details of the appearance; the licence applicant or licensee will be informed that an appearance has been granted and will be given copies of appearance documentation. If the licence applicant or licensee elects to appear, the other interested party will be provided with relevant documentation.
- (5) Copies of the documents received from interested parties and the AECB staff review will be transmitted to Board members as appropriate. Representations and appearance briefs that are sent to Board members will also be sent to the licence applicant or licensee.
- (6) The staff review and a record of actions taken will be placed in the AECB Ottawa public documents room.
- (7) Responses to representations will be at the discretion of the President or the Board as required and will normally be in written form.

FACTORS AFFECTING THE ACCEPTANCE OF REPRESENTATIONS AND REQUESTS FOR APPEARANCE

The following factors will be considered in determining whether a representation is forwarded to Board members or whether an appearance is granted:

- (1) Relevance to the matter in question and to the AECB's particular interest in health, safety and security.
- (2) Whether or not the submission is substantive and whether or not its substance has been previously considered.

The AECB bases its decisions primarily on scientific and technical analyses. Unsubstantiated views do not carry the same weight. If information has been previously considered by the AECB or other regulatory agencies and either accepted or discarded then it will likely not merit reconsideration.

- (3) The particulars of the submitters, including places of residence and how the submitters are affected.

Where time, duplication of information or other factors necessitate the limiting of the number of appearances on a given matter, the AECB will generally give priority to persons residing closest to the facility in question.

- (4) Receipt of the submission in accordance with established deadlines.

CONDUCT OF APPEARANCES

The following guidelines will apply:

- (1) The purpose of the appearance is to allow an interested party to make a summary presentation and to emphasize and detail the essence of the representation which was the basis for the appearance being granted. The AECB will receive and consider the information presented and may ask questions.
- (2) An appearance is normally 15 to 30 minutes long, including presentation, questions and comments.
- (3) Appearances are informal in nature; they have no legislative basis. Legal counsel is optional and generally not necessary.
- (4) An interested party is responsible for its own expenses associated with an appearance.
- (5) A delegation at an appearance may include up to three persons.

(6) All parties involved in an appearance should be present at the same time. Since appearances are not intended to be of an adversarial nature, all parties must follow the directions of the Chairman. The licence applicant or licensee is entitled to make the last presentation.

(7) Whether or not the AECS makes a public announcement on the matter to which an appearance relates, the parties appearing will be advised directly of any associated decision.

REFERENCES AND ADDRESSES
RELEVANT TO REPRESENTATIONS AND APPEARANCES

REFERENCES

Atomic Energy Control Act (RSC 1970, c.A-19)
Atomic Energy Control Regulations (C.R.C. c.365)
Physical Security Regulations (SOR/DORS/83/77)
Annual Reports of the Atomic Energy Control Board
AECB Policy on Public Access to Information (News Release 80-2)
AECB Public Consultation Program (News Release 81-1)
AECB Publications Catalogue
AECB Regulatory Agenda (News Release 83-1)

All of the foregoing items are available at no charge from the AECB Office of Public Information.

ADDRESSES

Postal Address

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Ottawa, Ontario, Canada K1P 5S9

Street Address

Atomic Energy Control Board
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Visitor reception: 4th floor

Office of Public Information,
Public Documents Room
and Library: 2nd floor

TELEPHONE NUMBERS

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Regulatory
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Atomic Energy
Control Board

Commission de contrôle
de l'énergie atomique

REGULATORY DOCUMENT R-85

Regulatory Policy Statement

RADIATION PROTECTION REQUISITES
FOR THE EXEMPTION OF CERTAIN
RADIOACTIVE MATERIALS FROM
FURTHER LICENSING UPON
TRANSFERRAL FOR DISPOSAL

Effective Date:

August 1, 1989

Canada

**R-85, RADIATION PROTECTION REQUISITES
FOR THE EXEMPTION OF CERTAIN
RADIOACTIVE MATERIALS FROM
FURTHER LICENSING UPON
TRANSFERRAL FOR DISPOSAL**

A draft of this document was issued for public comment as a Consultative Document (C-85) on May 6, 1985. On completion of the comment review and text revision process, the content was finalized and made effective on August 1, 1989.

Inquiries, or requests for copies should be addressed to:

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1. PURPOSE AND SCOPE

**RADIATION PROTECTION PREREQUISITES
FOR THE EXEMPTION OF CERTAIN
RADIOACTIVE MATERIALS FROM FURTHER
LICENSING UPON TRANSFERRAL FOR DISPOSAL**

1. PURPOSE AND SCOPE

This document describes the Regulatory Policy under which certain radioactive materials licensed by the Atomic Energy Control Board (AECB) pursuant to the Atomic Energy Control (AEC) Act and Regulations may be considered eligible for exemption from further licensing and regulation. Prerequisites for obtaining the required AECB approval are specified in terms of administrative requirements and compliance with radiation dose criteria.

Section 6 of the Regulations specifies situations in which no licence is required to possess radioactive material, and section 3 allows the AECB to exempt additional practices from licensing under certain circumstances. One of these circumstances is detailed in the Policy Statement of the following section, and relates specifically to instances where material is transferred from a person licensed to possess it to a person who will dispose it. When the circumstances of such disposal are considered to represent a negligible, or de minimis risk, expenditure of additional regulatory resources, or continued licensing of the material, is not justified.

Anticipated benefits from implementation of this Policy include increased efficiency and consistency in the regulation of radioactive wastes, and improved utilization of public resources.

2. REGULATORY CRITERIA

The criteria by which the AECB will determine the acceptability of applications for the exemption of certain radioactive materials from further licensing are expressed in the following Policy Statement:

"The AECB recognizes that persons accepting certain radioactive materials for disposal should be exempted from AECB licensing control. The AECB will use a de minimis dose of radiation to individuals of 0.05 millisievert in a year for deciding such exemptions on a case-by-case basis, provided that the radiological impact will be localized and the potential for exposure of large populations is small. Approval for exemption from further licensing will be given in such instances if it is satisfactorily demonstrated that these criteria are met, using methods and procedures no different from those that would be applied to the corresponding uncontaminated materials."

3. BACKGROUND

In Canada, a wide variety of low-level radioactive wastes is generated during all phases of the nuclear industry, from uranium mining, milling and refining to nuclear reactor operations, and from the use of radioisotopes in many industries, universities, hospitals and consumer products. These wastes vary in physical and chemical form and include contaminated process wastes, equipment, filters, instruments, protective clothing, and cleaning materials.

The bulk of the wastes thus generated is in solid form. Most of this is currently stored in dedicated radioactive waste management facilities. The operation of these facilities, including the production, handling, use and disposal of associated wastes, is regulated by the AECB, under the authority of the Atomic Energy Control (AEC) Act and Regulations, through a comprehensive licensing and inspection system designed to ensure health, safety, security and protection of the environment.

Section 25 of the AEC Regulations requires that any prescribed substances associated with the development, use, application or production of atomic energy shall not be abandoned or disposed of except in accordance with a licence, or written instructions, issued by the AECB. Consequently, a regulatory judgment and response must be made for any proposal to dispose of radioactive materials from nuclear fuel cycle operations or radioisotope operations, no matter how low the concentration, quantity or toxicity of the radionuclides present.

Some of the solid low-level radioactive wastes currently subject to AECB regulation, principally that from radioisotope use, are of such low radiological hazard that the AECB currently permits their disposal in the same manner as conventional garbage. Typically, these wastes are contaminated with trace amounts of radiochemicals and consist of laboratory glassware, syringes, paper and plastic materials.

Pursuant to Section 25 of the AEC Regulations, the AECB has in some circumstances issued general authorizations permitting the disposal in landfills of such consumer products as domestic ionization chamber smoke detectors. In other instances, AECB has endorsed on a case-by-case basis the disposal by commercial incineration of organic liquids contaminated with minor amounts of radionuclides, the disposal in industrial waste sites of certain process wastes containing naturally occurring radionuclides, and the recycling or reuse for non-nuclear purposes of equipment or tools contaminated to a minor degree with radionuclides. In each of these cases, the AECB has assessed the potential radiation exposures to workers and the general public as a consequence of the proposed disposal or recycling, and concluded that those exposures were insignificant relative to the radiation dose limits of the AEC Regulations.

In May, 1985, the AECB issued for public review and comment Consultative Document C-85, "The Basis for Exempting the Disposal of Certain Radioactive Materials From Licensing". That document considered the fact that most materials in common usage within and outside the nuclear industry contain some quantity of radionuclides, and correspondingly proposed that there exists a level of radioactivity that does not warrant the application of regulatory controls and the associated expenditure of public resources. C-85 further proposed the establishment and application of a de minimis dose criterion for exempting from AECB licensing the disposal of certain radioactive materials.

This Regulatory Policy Statement supercedes Consultative Document C-85.

Various past and current instances where regulatory approvals for disposal of low-level radioactive wastes have been granted by the AECB have been examined, and the associated exposures from these activities calculated to be well below the de minimis dose criterion (0.05 millisievert per year) of this document. These conclusions are supported by the results of similar studies and research completed by other national and international agencies.

4. DERIVATION OF REGULATORY CRITERIA

The primary de minimis dose criterion of 0.05 millisievert per year follows from the acceptance of a corresponding de minimis health risk. Various possible bases for the derivation of a de minimis dose criterion were examined by AECB staff and the concept of the existence of a negligible, or de minimis, level of risk was identified as fundamental and broadly applicable to all situations, including exposure to ionizing radiation. The choice of a de minimis dose criterion of 0.05 millisievert to an individual per year represents an extrapolation from a fatality risk of from cancer " 10^{-6} ". The secondary requirement of section 2, that the potential for exposure of large populations be small, is intended to restrict undue reliance on dilution as a means of attaining compliance with the de minimis dose criterion.

5. APPLICATION OF REGULATORY POLICY AND CRITERIA

This Regulatory Policy is applicable principally to the disposal of solid low-level radioactive wastes. In accordance with this Policy, and subject to the requirements and criteria of the same, the AECB will also consider on a case-by-case basis, applications for exemption from further licensing of certain miscellaneous liquid wastes. This Policy does not apply to those liquid or gaseous emissions currently designated as effluent discharges in the operating licences issued by the AECB for various nuclear facilities.

The introduction of this Policy will not affect the licensing of those operations currently designated as Waste Management facilities since they contain radioactive materials, or involve operations, for which AECB regulation will continue to be necessary. However, some wastes presently being sent to licensed waste management facilities may be eligible under the Policy for exemption from further AECB regulatory control.

In the initial application of this Regulatory Policy, the AECB will entertain applications from proponents wishing to have the disposal of wastes exempted from continued AECB regulation. Such applications must be supported by appropriate analyses and documentation demonstrating that the criteria of section 2 are satisfied. The rigour and comprehensiveness of the required predictive analyses should be commensurate with the scale of the potential hazard and the analyses should employ credible calculations and models based on realistic assumptions and data. The information provided to the AECB in support of an application must include such of the following information as appropriate:

(a) a detailed description of the materials for disposal, including their origin, chemical composition, radiological characteristics, physical state, volume and mass. The description of radiological characteristics should include identification of the radionuclides present and their respective concentrations, quantities, half-lives, and toxicity;

(b) details of the proposed disposal or recycling method and an assessment of the associated impact on workers and members of the general public. Where long-lived radionuclides are present, exposure pathways over the longer-term should be taken into account and the potential consequence of re-use of the site examined;

(c) identification of the planned destination of the waste material upon release from the nuclear facility or premises and any additional information regarding its ultimate destination;

(d) details of the monitoring, analytical and decontamination procedures undertaken at the nuclear facility or premises to characterize the waste material and to minimize the presence of removable radioactive contamination on internal and external surfaces; and

(e) in cases where it is considered necessary to ensure that the waste materials are disposed of, or recycled, as proposed, details of the administrative procedures that could be implemented to achieve this assurance.

In reviewing applications pursuant to this Regulatory Policy, AECB will consider the potential consequences, in terms of radiation exposure, to the critical group and to larger populations. If a critical group is already receiving some dose contribution from an existing "exempt" disposal practice this will be taken into account in approving the exemption of any additional practice likely to add to this exposure. Furthermore, the AECB will periodically review the approvals issued to date in order to ensure that the relevant parameters of the situation have not changed significantly.

Application of this Regulatory Policy, and any exemption of the disposal of radioactive materials from AECB regulatory control, does not absolve the possessor or owner of such wastes from responsibility for complying with other pertinent federal, provincial or municipal requirements.

APPROVED FOR RELEASE BY THE
ATOMIC ENERGY REGULATORY BOARD
ON 11/11/1984
IN ACCORDANCE WITH THE
ATOMIC ENERGY ACT, 1986



Regulatory Document

Texte de réglementation



Atomic Energy
Control Board

Commission de contrôle
de l'énergie atomique

REGULATORY DOCUMENT R-90

Regulatory Policy Statement

POLICY ON THE DECOMMISSIONING OF NUCLEAR FACILITIES

Effective date:

August 22, 1988

Canada

**R-90, POLICY ON THE DECOMMISSIONING
OF NUCLEAR FACILITIES**

A draft of this document was issued for public comment as a Consultative Document (C-90) on October 15, 1985. On completion of the comment review and text revision process, the content was finalized and made effective on August 22, 1988.

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POLICY ON THE DECOMMISSIONING OF NUCLEAR FACILITIES

1. PURPOSE AND SCOPE

This Regulatory Policy Statement describes the policy of the Atomic Energy Control Board (AECB) on the decommissioning of those facilities defined as nuclear facilities in the Atomic Energy Control (AEC) Regulations.

It is intended as a formal statement, primarily for the information of licensees, or potential licensees, of the regulatory process and requirements generally applicable to the decommissioning of nuclear facilities licensed and regulated by the AECB pursuant to the authority of the AEC Act and Regulations.

2. INTRODUCTION

The Atomic Energy Control (AEC) Regulations prohibit the holder of a licence issued pursuant to the AEC Act and Regulations from abandoning prescribed substances except in accordance with conditions of a licence issued by the AECB, or in accordance with the written instructions of the AECB. Therefore, prior to the granting of an approval to abandon a nuclear facility licensed pursuant to the AEC Act and Regulations, the AECB requires that the licensee decommission the facility satisfactorily.

Within the context of this Regulatory Policy Statement the "decommissioning" of a nuclear facility means those actions taken by the licensee, in the interests of health, safety, security and protection of the environment, to retire that facility permanently from service. Related activities may therefore include dismantling of the facility, decontamination of components, surface or site reclamation activities and work performed to render any residues safe. The decommissioning programs appropriate to specific nuclear facilities may vary greatly with facility type and, to a lesser extent, amongst facilities of similar type. Decommissioning of individual facilities may be accomplished in continuous programs or over discrete progressive or intermittent phases. It may thus include, with valid justification, periods of "storage with surveillance". Consequently, the time periods required to complete individual decommissioning programs will be facility specific, and may range from shortly after cessation of operations to several decades. Despite any differences in these decommissioning programs and the associated schedules of implementation, similar regulatory requirements, process, and objectives are generically applicable.

3. AECB POLICY ON DECOMMISSIONING

The AECB policy on the decommissioning of nuclear facilities is summarized by the following statement:

The AECB requires that all nuclear facilities be decommissioned satisfactorily in the interests of health, safety, security and protection of the environment, according to plans approved by the AECB. Such plans shall be developed during the early stages of design of the nuclear facility and refined during the operating life of the facility, and the associated decommissioning actions assured by adequate financial planning.

The implementation of this policy is discussed in ensuing sections.

4. REGULATORY REQUIREMENTS

In the application and enforcement of its policy on the decommissioning of nuclear facilities, the AECB relies on its comprehensive licensing system currently in place. This system is administered with the cooperation of other federal and provincial government departments in such areas as health, environment, transport and labour. Through this cooperation and interaction, the concerns and responsibilities of these agencies are taken into account before licences or approvals, including those for decommissioning and abandonment, are issued by the AECB.

The AECB requires that licensees address decommissioning of their facilities at various stages of facility licensing. Initial considerations of decommissioning requirements normally occur at the facility design stage with progressive refinement of decommissioning plans occurring over the operational life of the facility, and culminating with the successful implementation of a decommissioning plan approved by the AECB. When the decommissioning of a nuclear facility has been completed, and its effectiveness confirmed to the satisfaction of the AECB, the licensee will be permitted to abandon the site and will be absolved of further responsibility for it under the AEC Act and Regulations. The requirements at the various stages of a facility's lifetime are further discussed below.

4.1 Pre-Operational

For new facilities, the AECB requires, before the issuance of a construction approval, a conceptual description of the decommissioning approach envisaged by the applicant. The detail and design of this conceptual plan must be such as to assure that the proposed approach is, in the light of existing knowledge, technically feasible and appropriate in the interests of health, safety, security and protection of the environment. The plan shall also indicate how the proponent will assure that sufficient financial resources are available to complete the required decommissioning work in the event of scheduled or unscheduled closure of the facility.

Acceptance by the AECB of a conceptual decommissioning plan does not preclude the likelihood that the plan may need to be subsequently updated or modified to reflect changed circumstances, operations, or factors affecting financial assurances.

4.2 Operational

Licensees who do not currently have conceptual decommissioning plans in place will be required, subsequent to publication of this Regulatory Policy Statement, to develop such plans and submit them to the AECB. These plans

should be similar in scope and content to the conceptual plans required for new facilities. Periodic updates of conceptual decommissioning plans may be required over the operational life-time of nuclear facilities, as warranted by changing circumstances or operations.

A detailed decommissioning proposal must be submitted to the AECB at least one year before the scheduled end of operations, or within six months of the announcement of an unscheduled permanent shutdown of a nuclear facility. The required decommissioning proposal should be submitted in support of the application for a licence to decommission the nuclear facility, and must include such of the following information as may be applicable:

- (a) the proposed date of the start of the decommissioning;
- (b) a description and time schedule of the actions proposed to be taken to decommission the facility;
- (c) a justification of the time schedule;
- (d) the results of any survey carried out by the applicant to estimate
 - (i) the radiation levels and the quantities and types of radioactive prescribed substances that are present in the facility, and
 - (ii) the concentrations of radioactive prescribed substances that are present on surfaces and in air,

or where it is not possible or reasonable to carry out such a survey, a projection of

- (iii) the radiation levels and the quantities and types of radioactive prescribed substances that may be expected to be present in the facility, and
- (iv) the concentrations of radioactive prescribed substances that may be expected to be present on surfaces and in air

at the time when operations will cease;

- (e) a description of the anticipated inventory of radioactive waste and toxic wastes arising from the decommissioning of the facility and the place and manner in which it is proposed to dispose of such wastes;
- (f) full particulars of a quality assurance program for the decommissioning of the facility as it relates to health, safety and the protection of the environment;
- (g) a description of the hazards that might result from the decommissioning of the nuclear facility and of the measures to be taken, to prevent or control those hazards;
- (h) a description of the measures to be taken to limit radiological and other hazards in the event of an accident;

(i) a description of the predicted impact of the decommissioning operations and of any residual hazardous substances on the environment and on the health and safety of members of the public, together with an estimate of the residual radiation levels and the quantities and types of residual hazardous substances;

(j) details of any controls that may be required to keep the impact within predicted limits;

(k) any other information that the Board or a designated officer may require to evaluate the application with respect to health, safety, security, any applicable safeguards and protection of the environment.

4.3 Post-Operational

4.3.1 Deferment of Decommissioning

Any deferment of the decommissioning of a nuclear facility must be planned and justified, and must not be indeterminate. Acceptable reasons for deferment would include a lack of suitable waste disposal facilities, or a significant reduction in hazard to workers involved with the decommissioning work.

Decommissioning plans involving deferment of action must include a schedule of activities intended to lead to eventual completion of decommissioning. AECB approval of such plans will be issued for a specified term, and any extension will be contingent upon satisfactory performance of the facility and demonstration by the licensee that the requested extension would not be deleterious to the environment, security, or the health and safety of workers or members of the public.

At least five years before the end of a prolonged deferment period, the licensee shall demonstrate that planning is sufficiently advanced that outstanding decommissioning actions are likely to be performed on schedule. At least one year before the end of the deferment period, the licensee must also submit to the AECB a detailed plan for completion of decommissioning.

4.4 Post-Decommissioning

4.4.1 Reliance on Institutional Controls

In general, reliance on institutional control mechanisms which involve active on-going human intervention (such as effluent treatment systems) to control the impacts from decommissioned facilities is not acceptable. However, more static institutional control mechanisms, such as land use controls subsequent to completion of decommissioning activities, may be acceptable. In all instances where a licensee proposes a decommissioning plan which requires the establishment of long-term institutional controls subsequent to completion of decommissioning actions, the AECB requires that the licensee consider the feasibility of implementing alternative decommissioning actions to avoid the need for continuing institutional controls. This evaluation should consider the nature and costs of the controls envisaged and the capability of the institutions concerned to implement and maintain the proposed controls.

4.4.2 Abandonment

If "prescribed substances", as defined in the AEC Regulations, have been removed from a nuclear facility, and the facility has been decommissioned to the satisfaction of the AECB, approval to abandon the site will be granted.

If prescribed substances remain on site subsequent to the decommissioning of a nuclear facility, the AECB may require a period of monitoring (to be known as the "transition phase") before it will approve an application from the licensee to abandon the site. During such a transition phase, the licensee would be required to conduct a monitoring program to evaluate the impacts of the decommissioned site relative to the predicted performance. The AECB would review the results of the monitoring programs conducted, and any other relevant information, in order to determine the adequacy of the work undertaken to decommission the facility. The transition phase might span five years or more depending on the circumstances. Should the results obtained during the initial monitoring period cast doubt upon the validity of the licensee's predictions concerning the long-term safety of the site, the transition phase might be extended to allow for additional monitoring and assessment.

The granting of AECB approval to abandon a decommissioned nuclear facility establishes that the licensee has fulfilled his obligations under the AEC Regulations with respect to that facility, and is therefore absolved of further responsibility for the site under the AEC Regulations. The issuance of such approval pursuant to the AEC Regulations does not absolve the licensee of responsibility to comply with the requirements of other federal, provincial, or municipal agencies.